

shp 30605

Work Order ID 102051

\*102051\*

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May-23-13 7:44:21 AM

Item ID: D3183-041 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Bracket Assembly  
 Start Date: 5/23/13 Start Qty: 2.00 \*2\* Cust Item ID:  
 Required Date: 5/31/13 Req'd Qty: 2.00 \*2\* Customer:  
 Reference:

Approvals: Process Plan: W Date: 13-05-23 Tooling: Date: Run Start \*NR1\*  
 QC: Date: SPC (Y/N): Date: Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3183	Rev C1								
100	BAND SAW	0.00							
*100*									
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	Cut blanks: (1.500" x 2.000") 4.300" long								
110	HAAS CNC VERTICAL MACHINING #1	0.00							
*110*									
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine D3183-1 as per Folio FA320 and Dwg D3183Identify as D3183- 12-Deburr3-Scribe batch number								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
*120*									
QC	Memo	0.00							
Quality Control									

4 13-5-25

conf 13/05/25

4

conf 13/05/25

4

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May-23-13 7:44:21 AM

Item ID:	D3183-041	Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:				Stop		*NS2*
Item Name:	Bracket Assembly					
Start Date:	5/23/13	Start Qty: 2.00	*2*	Cust Item ID:		
Required Date:	5/31/13	Req'd Qty: 2.00	*2*	Customer:		
Reference:						
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start *NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00		FR	13/05/27	4	0		
140 *140* Small Fab Small Fab	Small Fab  Memo Assemble D3183-041 as per Dwg D3183.	0.00  0.00				4x			13/05/27
150 *150* QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00		210 200 B.S 27		4			

# Picklist Print

May-23-13 7:44:21 AM

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Work Order ID: 102051

Parent Item: D3183-041

Parent Item Name: Bracket Assembly

Start Date: 5/23/13

Required Date: 5/31/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:Pick:A04.02.18New issueKJ/DS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3121-21 Bolt		Manufactured	No			140	Each	71.0000	2	4		5/13/05/27	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST235		71							
				99292		41							
				99601		30							
D3183-045 Bearing Assembly		Manufactured	No			100	Each	33.0000	2	4		5/13/05/27	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		5							
				88587		5							
				ST235B		28							
				96471		27							
				97336		1							
M174B2.000X01.500 17-4 SS Bar 2.00 x 1.500		Purchased	No			140	f	7.5760	0.4583	0.9648421		5/13-5-35	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT049		7.576							
				113189		7.576							

~~17124085~~

1.5

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	102051
<b>Description:</b> Bracket		<b>Part Number:</b>	D3183-1
<b>Inspection Dwg:</b> D3183 <b>Rev:</b> C1		<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article      ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.400	+/-0.010					
0.182	+/-0.010	.184	—		Vern	M1-D6
0.070	+/-0.010	.072	—		"	
0.100	+/-0.010	.097	—		"	
R0.063	+/-0.010	R.063	—		R-6	
R0.189	+/-0.010	R.182	—		"	
3.881	+/-0.010	3.882	—		Vern	M1-D6
4.17	+/-0.030	4.170	—		"	
0.830	+/-0.010	.830	—		"	
0.500	+/-0.010	.500	—		"	
0.218	+/-0.010	.216	—		"	
1.030	+/-0.010	1.030	—		"	
1.90	+/-0.030	1.891	—		"	
1.012	+/-0.010	1.014	—		"	
0.786	+/-0.010	.786	—		"	
R0.19	+/-0.010	R.190	—		R-6	
Ø0.392	+0.002/-0.000	Ø.3933	—		Micro	M1-D2
0.162	+/-0.010	.163	—		Vern	M1-D6
2.799	+/-0.010	2.799	—		"	
2.075	+/-0.010	2.075	—		"	
0.162	+/-0.010	.161	—		"	
0.032	+/-0.010	.030	—		"	
0.381	+/-0.010	.375	—		"	
0.200	+/-0.010	.197	—		"	

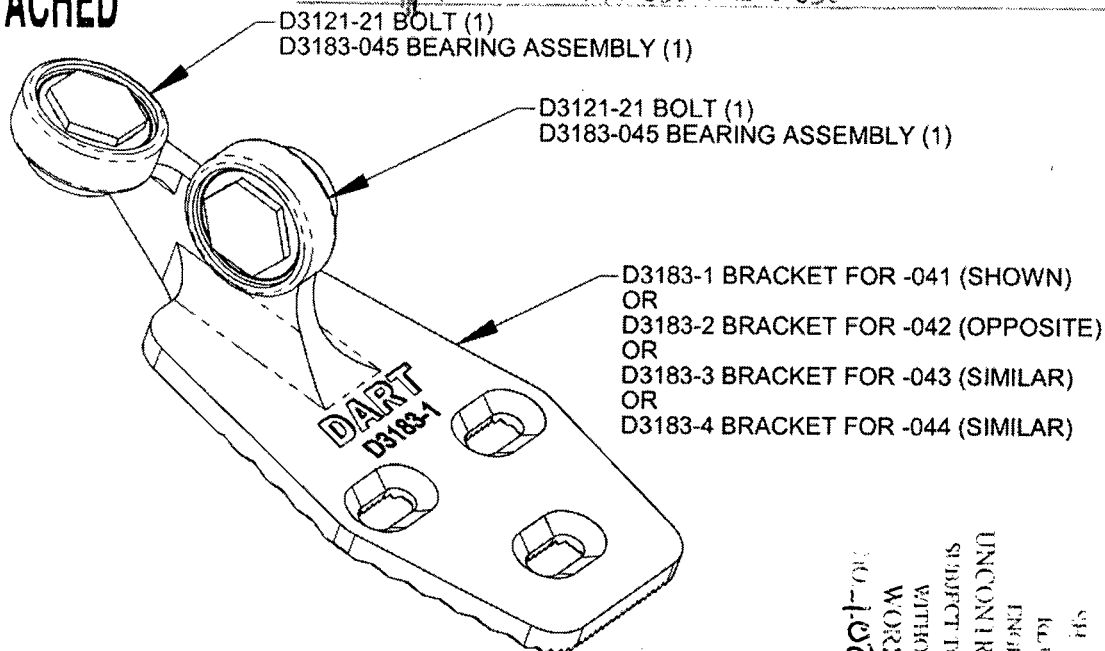
<b>Measured by:</b>	<i>cm</i>	<b>Audited by:</b>	<i>F&amp;L</i>	<b>Prototype Approval:</b>	N/A
<b>Date:</b>	13/05/27	<b>Date:</b>	13/05/27	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	05.02.17	New Issue (P/O D3183-041/-042)	KJ/JLM	<i>[Signature]</i>



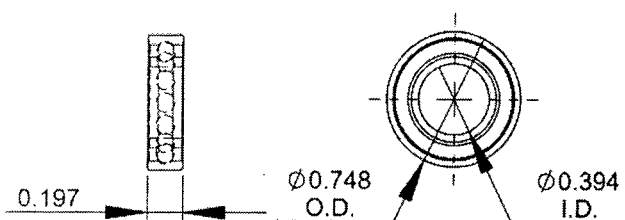
DESIGN #	DRAWN BY CP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. <b>D3183</b>	REV. C SHEET 1 OF 4
DATE <b>04.02.17</b>		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1
A	03.01.24	NEW ISSUE	
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
CI	# 04.11.09	0.830 WAS 0.850	

RELEASED  
04 03 01  
DEO ATTACHED



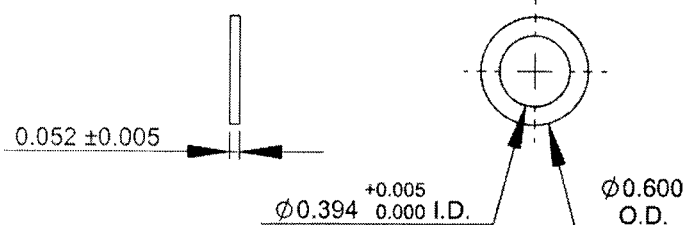
**D3183-041 BRACKET ASSEMBLY (SHOWN)**  
**D3183-042 BRACKET ASSEMBLY (OPPOSITE)**  
**D3183-043 BRACKET ASSEMBLY (SIMILAR)**  
**D3183-044 BRACKET ASSEMBLY (SIMILAR)**

UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
10-102051-MCS  
13-08-23



#### **D3183-5 BEARING: SPECIFICATION CONTROL DRAWING**

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



#### **D3183-7 WASHER**

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

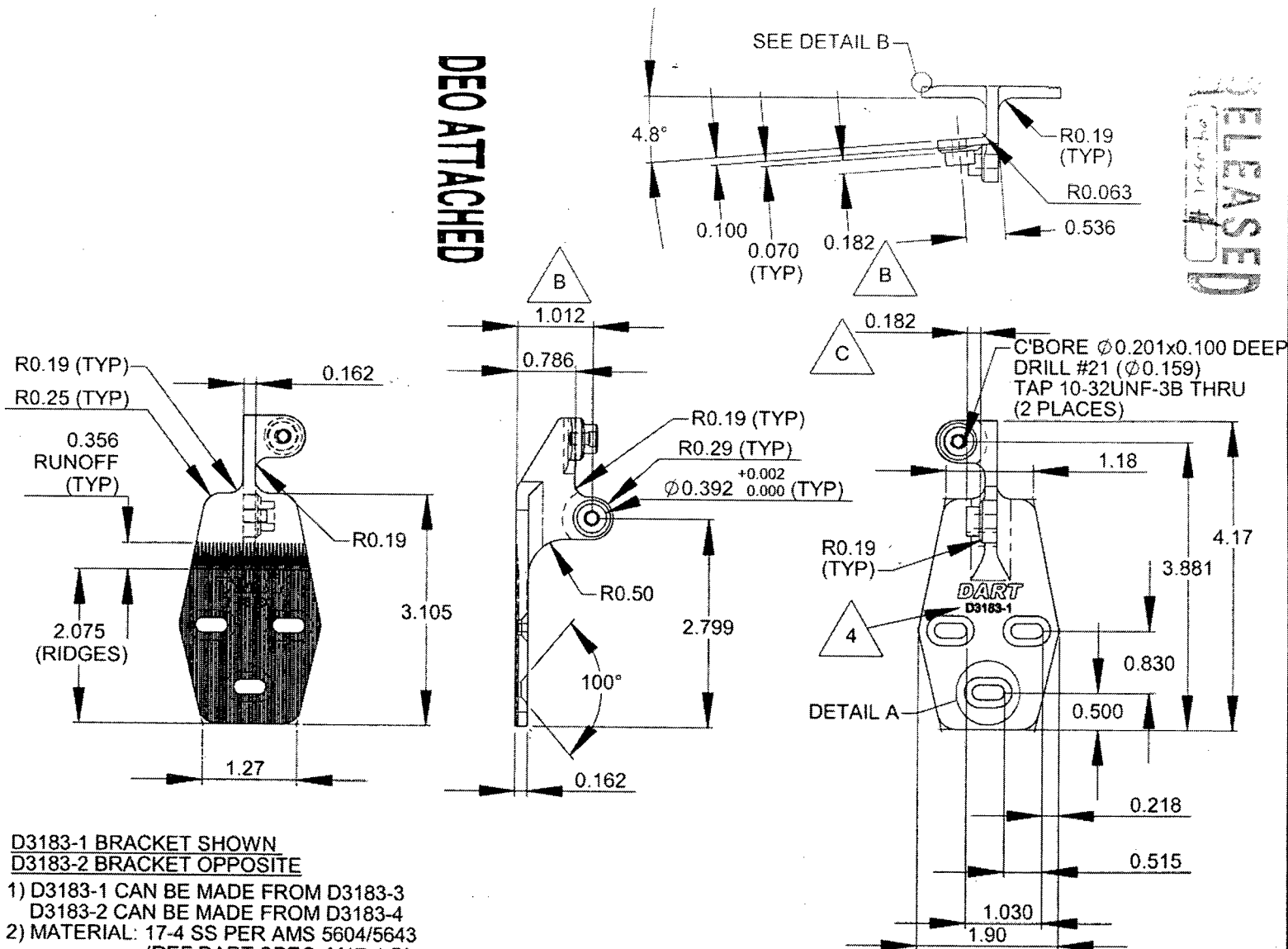
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**DART**

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3183</b>	REV. C
DATE 04.02.17	TITLE BRACKET ASSEMBLY	SHEET 2 OF 4	
	SCALE 1:2		

**DEO ATTACHED**

**D3183-1 BRACKET SHOWN**  
**D3183-2 BRACKET OPPOSITE**

- 1) D3183-1 CAN BE MADE FROM D3183-3  
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

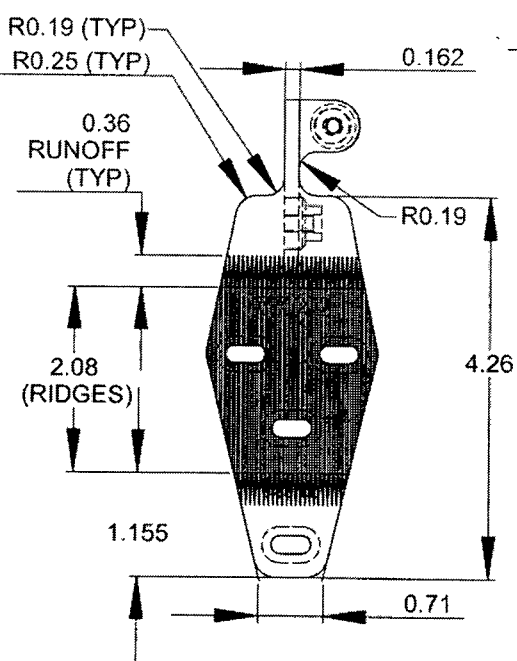
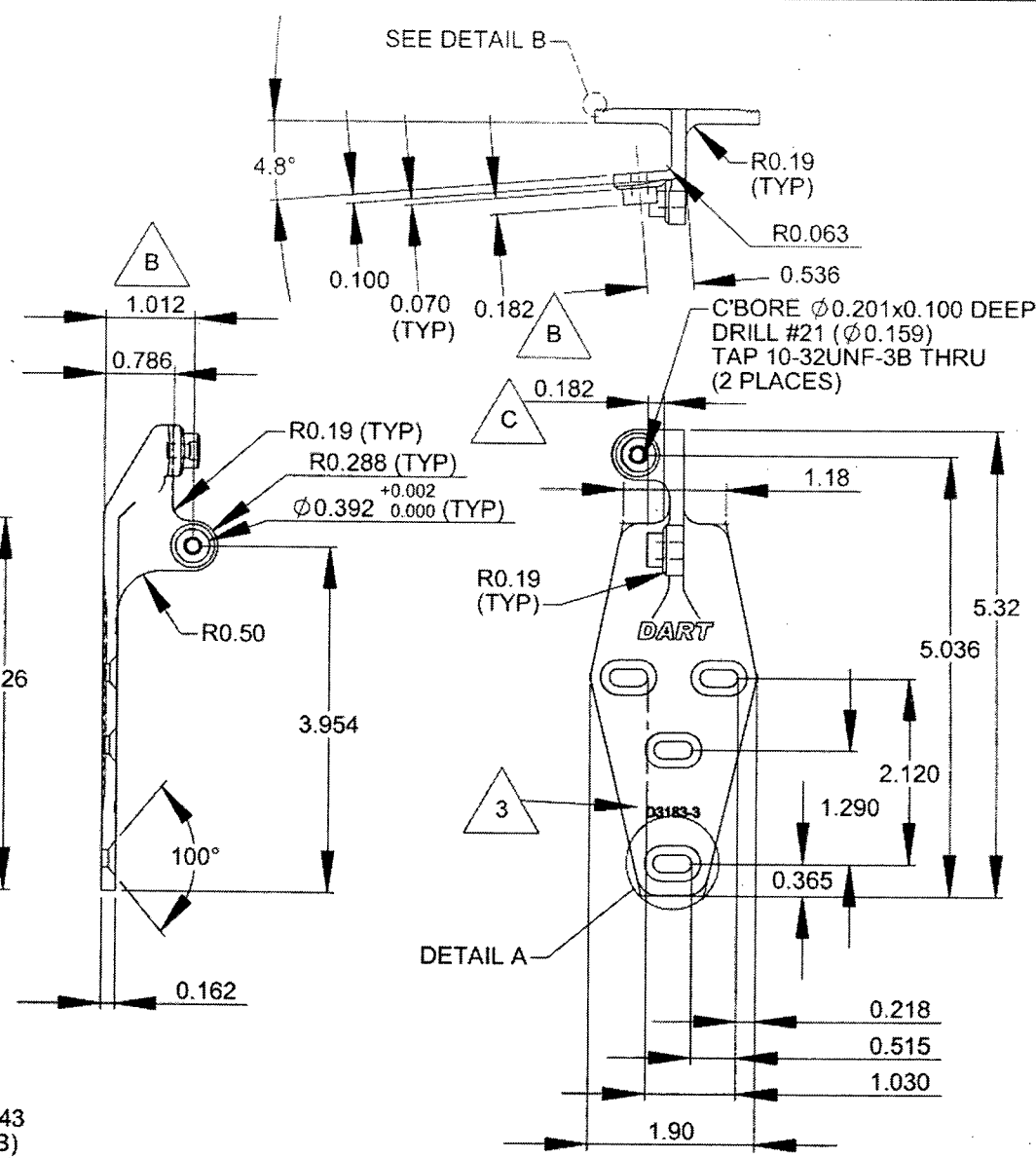
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DATE	TITLE	REV. C
04.02.17	BRACKET ASSEMBLY	SHEET 3 OF 4
		SCALE 1:2



D3183-3 BRACKET SHOWN  
(REPLACES BELL P/N 412-030-304-105)  
D3183-4 BRACKET OPPOSITE  
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

DEO ATTACHED

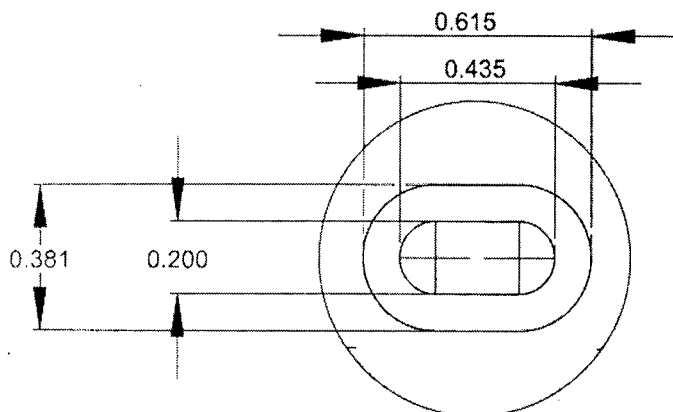
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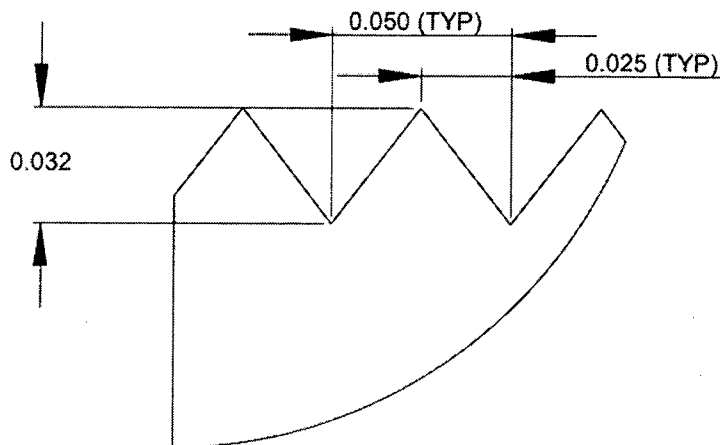
DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3183</b>	REV. C SHEET 4 OF 4
DATE <b>04.02.17</b>		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1



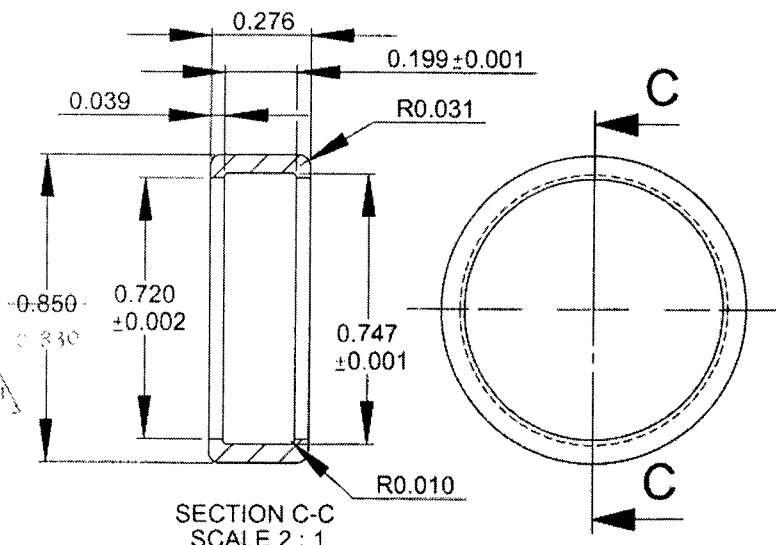
DETAIL A (2 : 1)

RELEASED  
04-03-01

DEO ATTACHED



DETAIL B (20 : 1)



**D3183-9 CAP**

- 1) MATERIAL: DELRIN ROD, Ø1.00  
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018  
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

**D3183-045 BEARING ASSEMBLY**

- 1) ASSEMBLE D3183-5 BEARING AND  
D3183-9 CAP

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102051



102051

DRAWING NO. D3183	TITLE BRACKET ASSEMBLY	REV.C1	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3183-C1-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN 92	CHECKED [Signature]	MFG. APPR. [Signature]	APPROVED [Signature]		DE APPR. [Signature]		
DATE 10.05.14	DATE 10.06.30	DATE 10.06.30	DATE 10/06/30		DATE 10/06/30		

D3183-5 BEARING

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT:      Cr = 1720 N (386 lb) MIN [DYNAMIC]  
Cor = 840 N (188 lb) MIN [STATIC]

REF PAR 10-012

**RELEASED**  
2010-07-22  
[Signature]

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